START
Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

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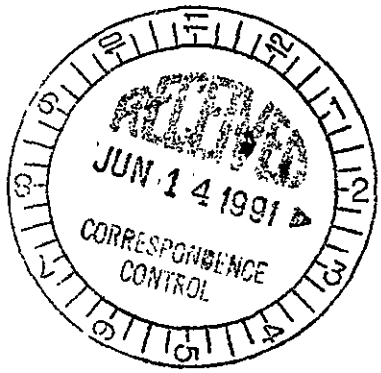
MAY 31 1991



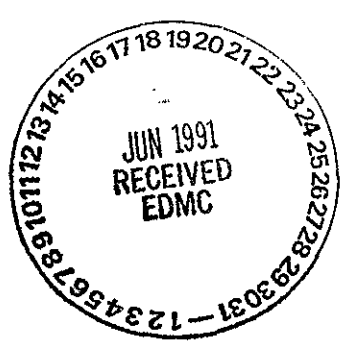
Mr. Timothy L. Nord
Hanford Project Manager
State of Washington
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504-8711

Dear Mr. Nord:

REVISION TO THE DANGEROUS WASTE PART A PERMIT APPLICATION FOR THE 4843 ALKALI METAL STORAGE FACILITY (WA7890008967) (S-4-1)

Enclosed is the Dangerous Waste Part A Permit Application Form 3, for the 4843 Alkali Metal Storage Facility (4843 AMSF). The 4843 AMSF is used for the storage of dangerous and mixed alkali metal waste generated on the Hanford Site. This waste management unit will continue to receive and store dangerous and mixed alkali metal waste until the Hanford Central Waste Complex is capable of accepting this type of waste in November 1992. The 4843 AMSF will then be closed as outlined in a closure plan to be submitted to Ecology by June 30, 1991, in fulfillment of the Hanford Federal Facility Agreement and Consent Order Milestone M-20-14.

Form 3, Revision 2, for the 4843 AMSF has been revised to add Dangerous Waste Codes: D001, D002, WT01, and WT02. These dangerous waste codes have been added in compliance with the Washington Administrative Code 173-303. In addition, a new drawing and interior photographs were added to more accurately reflect the current storage area design.



If you have any questions regarding the enclosed permit application revision, please contact Mr. C. E. Clark of the U.S. Department of Energy, Richland Operations Office on (509) 376-9333, or Ms. C. J. Geier of Westinghouse Hanford Company on (509) 376-2237.

Sincerely,

E. A. Bracken

E. A. Bracken, Director
Environmental Restoration Division
Richland Operations Office

ERD:CEC

R E Lerch

R. E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company

Enclosure:
Dangerous Waste Part A Permit
Application For the 4843 AMSF

cc: P. T. Day, EPA, w/encl.
D. L. Duncan, EPA, w/encl.
R. E. Lerch, WHC, w/o encl.

THE 4843 ALKALI METAL STORAGE FACILITY PART A PERMIT APPLICATION (S-4-1)

This Part A permit application consists of a Form 1 (not revised) and a Form 3, Revision 2, that describes the 4843 Alkali Metal Storage Facility (4843 AMSF) in general terms.

The Part A permit application Form 3, has been revised to address the addition of Dangerous Waste Codes D001 (ignitability), D002 (corrosivity), WT01 (Extremely Hazardous Waste), and WT02 (Dangerous Waste, if less than four pounds). The addition of these dangerous waste codes is based on information provided by the waste management unit that identified these dangerous waste constituents as being stored at the 4843 AMSF. Dangerous waste code D001 was added in accordance with the June 1, 1990, Federal Register which identified sodium metal as ignitable. These dangerous waste codes were added in compliance with the Washington Administrative Code (WAC) 173-303-805. This regulation requires a revised Part A permit application to include any dangerous waste that may be treated or stored at a waste management unit with interim status that has not been previously identified.

The State of Washington Department of Ecology and the U.S. Environmental Protection Agency (EPA) agreed to close the 4843 AMSF on November 26, 1990. A new submittal date of June 30, 1991, was established for the 4843 AMSF Closure Plan. However, this waste management unit will continue to receive and store dangerous and mixed alkali metal waste until the Hanford Central Waste Complex is capable of accepting this type of waste in November 1992.

The following is an overview of the 4843 AMSF Part A permit application, Form 3, contents.

Section I — The EPA/State Identification Number - No change.

Section II — First or Revised Application - No change.

Section III — Processes - Codes and Design Capacities - This section was modified to more accurately reflect the current storage area configuration.

Section IV — Description of Dangerous Waste - This section describes the dangerous waste that is being stored at the 4843 AMSF. In Blocks A and B, four dangerous waste codes (D001, D002, WT01, and WT02) and their estimated annual quantities of dangerous waste were added in accordance with WAC 173-303-805. Table 1 of this explanation provides the dangerous waste number, estimated annual quantities of dangerous waste, and description of chemical constituents. Block C has no changes. Section IV.E., "Description of Dangerous Waste," provides additional details of the dangerous waste stored at the 4843 AMSF.

Section V — Facility Drawing - New facility drawings have been added to more accurately reflect the storage area design.

Section VI — Photographs - New photographs have been added to more accurately portray the conditions at the waste management unit.

Section VII — Facility Geographic Location - No change.

Section VIII — Facility Owner - No change.

Section IX — Owner Certification - The certification is signed by the Manager, U.S. Department of Energy-Richland Operations Office (DOE-RL).

The Manager of DOE-RL was changed from Michael J. Lawrence to John D. Wagoner.

Section X — Operator Certification - An attachment is provided to the Form 3 to be signed by the Manager, DOE-RL, as owner/operator and the President, Westinghouse Hanford Company, as co-operator. These signatures certify management's belief that the submitted information is true, accurate, and complete.

The Manager of DOE-RL was changed from Michael J. Lawrence to John D. Wagoner.

The President of WHC was changed from William M. Jacobi to Thomas M. Anderson.

TABLE 1

KEY TO DANGEROUS WASTE IDENTIFICATION NUMBERS

PART A, SECTION IV

Dangerous Waste Number	Annual Quantity of Dangerous Waste, Pounds	Description of Chemical Constituents
*D001	185,000	Dangerous waste that exhibits characteristics of ignitability (e.g., sodium metal)
*D002	**	Dangerous waste that exhibits characteristics of corrosivity (e.g., sodium metal)
D003	**	Dangerous waste that exhibits characteristics of reactivity (e.g., sodium metal)
*WT01	**	Toxic - Extremely Hazardous Waste, state-only designation (e.g., sodium metal)
*WT02	**	Toxic - Dangerous Waste, state-only designation (e.g., sodium metal if less than 4 pounds)

* - New dangerous waste codes
** - Included within 185,000 pounds

ATTACHMENT 2

Continued from the front.

III. PROCESSES (continued)

SPACE FOR ADDITIONAL PROCESS CODES OR FOR DESCRIBING OTHER PROCESS (code "T04"). FOR EACH PROCESS ENTERED HERE INCLUDE DESIGN CAPACITY.

S01

The 4843 Alkali Metal Storage Facility (4843 AMSF) is used for the storage of alkali metal waste generated from the Fast Flux Test Facility and from various other operations on the Hanford Site that use alkali metals.

The 4843 AMSF currently houses dangerous and mixed alkali metal waste. The dangerous alkali metal waste storage area is separated from the mixed alkali metal storage area by a rope divider. The use of concrete blocks inside the 4843 AMSF provides shielding to protect the environment from radioactive alkali metal waste. Waste storage containers may include steel 5-, 30-, and 55-gallon drums, or sealed piping and sealed components that have been welded closed. The estimated annual quantity of waste has been calculated using design conditions for a maximum storage of 22,000 gallons (185,000 pounds) of alkali metal waste. The 4843 AMSF does not presently contain the estimated quantity; however, there is potential for additional waste to be stored.

IV. DESCRIPTION OF DANGEROUS WASTES

A. DANGEROUS WASTE NUMBER — Enter the four digit number from Chapter 173-303 WAC for each listed dangerous waste you will handle. If you handle dangerous wastes which are not listed in Chapter 173-303 WAC, enter the four digit number(s) that describes the characteristics and/or the toxic contaminants of those dangerous wastes.

B. ESTIMATED ANNUAL QUANTITY — For each listed waste entered in column A estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A estimate the total annual quantity of all the non—listed waste(s) that will be handled which possess that characteristic or contaminant.

C. UNIT OF MEASURE — For each quantity entered in column B enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed dangerous waste: For each listed dangerous waste entered in column A select the code(s) from the list of process codes contained in Section III to indicate how the waste will be stored, treated, and/or disposed of at the facility.

For non—listed dangerous wastes: For each characteristic or toxic contaminant entered in Column A, select the code(s) from the list of process codes contained in Section III to indicate all the processes that will be used to store, treat, and/or dispose of all the non—listed dangerous wastes that possess that characteristic or toxic contaminant.

Note: Four spaces are provided for entering process codes. If more are needed: (1) Enter the first three as described above; (2) Enter "000" in the extreme right box of item IV-D(1); and (3) Enter in the space provided on page 4, the line number and the additional code(s).

2. PROCESS DESCRIPTION: If a code is not listed for a process that will be used, describe the process in the space provided on the form.

NOTE: DANGEROUS WASTES DESCRIBED BY MORE THAN ONE DANGEROUS WASTE NUMBER — Dangerous wastes that can be described by more than one Waste Number shall be described on the form as follows:

1. Select one of the Dangerous Waste Numbers and enter it in column A. On the same line complete columns B, C, and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
2. In column A of the next line enter the other Dangerous Waste Number that can be used to describe the waste. In column D(2) on that line enter "included with above" and make no other entries on that line.
3. Repeat step 2 for each other Dangerous Waste Number that can be used to describe the dangerous waste.

EXAMPLE FOR COMPLETING SECTION IV (shown in line numbers X-1, X-2, X-3, and X-4 below) — A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operation. In addition, the facility will treat and dispose of three non—listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

LINE NO.	A. DANGEROUS WASTE NO. (enter codes)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))
X-1	K 0 5 4	900	P	T 0 3 D 8 0	
X-2	D 0 0 2	400	P	T 0 3 D 8 0	
X-3	D 0 0 1	100	P	T 0 3 D 8 0	
X-4	D 0 0 2			T 0 3 D 8 0	included with above

Please print or type in the unshaded areas only
(All elites are spaced for elite type, i.e., 12 characters/inch)

FORM 3

DANGEROUS WASTE PERMIT APPLICATION

I. EPA/STATE I.D. NUMBER: WA7890008967

FOR OFFICIAL USE ONLY

APPLICATION APPROVED	DATE RECEIVED (mo., day, & yr.)	COMMENTS

II. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility or a revised application. If this is your first application and you already know your facility's EPA/STATE I.D. Number, or if this is a revised application, enter your facility's EPA/STATE I.D. Number in Section I above.

A. FIRST APPLICATION *(place an "X" below and provide the appropriate date)*

☐ 1. EXISTING FACILITY *(See instructions for definition of "existing" facility. Complete item below.)*

FOR EXISTING FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED *(use the boxes to the left)*: MO 04, DAY 10, YR 86

☐ 2. NEW FACILITY *(Complete item below.)*

FOR NEW FACILITIES, PROVIDE THE DATE *(mo., day, & yr.)* OPERATION BEGAN OR IS EXPECTED TO BEGIN: MO, DAY, YR

B. REVISED APPLICATION *(place an "X" below and complete Section I above)*

☒ 1. FACILITY HAS AN INTERIM STATUS PERMIT

☐ 2. FACILITY HAS A FINAL PERMIT

III. PROCESSES — CODES AND DESIGN CAPACITIES

A. PROCESS CODE — Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, then describe the process *(including its design capacity)* in the space provided on the *(Section III-C)*.

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.
1. AMOUNT — Enter the amount.
2. UNIT OF MEASURE — For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Storage:		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS
Disposal:		
INJECTION WELL	D80	GALLONS OR LITERS
LANDFILL	D81	ACRE-FEET *(the volume that would cover one acre to a depth of one foot)* OR HECTARE-METER
LAND APPLICATION	D82	*ACRES OR HECTARES*
OCEAN DISPOSAL	D83	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D84	GALLONS OR LITERS

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
Treatment:		
TANK	T01	GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	T02	GALLONS PER DAY OR LITERS PER DAY
INCINERATOR	T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Section III-C.)	T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	C
GALLONS PER DAY	U
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H
ACRE-FEET	A
HECTARE-METER	F
ACRES	B
HECTARES	Q

EXAMPLE FOR COMPLETING SECTION III *(shown in line numbers X-1 and X-2 below)*: *A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400* gallons. *The facility also has an incinerator that can burn up to 20 gallons per hour.*

LINE NUMBER	A. PROCESS CODE *(from list above)*	B. PROCESS DESIGN CAPACITY 1. AMOUNT *(specify)*	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE *(enter code)*	FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE *(from list above)*	B. PROCESS DESIGN CAPACITY 1. AMOUNT *(specify)*	B. PROCESS DESIGN CAPACITY 2. UNIT OF MEASURE *(enter code)*	FOR OFFICIAL USE ONLY
X-1	S02	600	G		5				
X-2	T03	20	E		6				
1	S01	22,000	G		7				
2					8				
3					9				
4					10				

Continued from page 2.

NOTE: Photocopy this page before completing if you have more than 26 wastes to list.

I.D. NUMBER (enter from page 1)

WA7890008967

IV. DESCRIPTION OF DANGEROUS WASTES (continued)

LINE NO.	A. DANGEROUS WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEASURE (enter code)	D. PROCESSES 1. PROCESS CODES (enter)	D. PROCESSES 2. PROCESS DESCRIPTION (If a code is not entered in D(1))
1	D001	185,000	P	S01	Storage/container
2	D002				
3	D003				
4	WT01				
5	WT02				Included with above
6					
7					
8					
9					
10					
11					
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24					
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26					

Continued from the front

IV. DESCRIPTION OF DANGEROUS WASTES *(continued)*

E. USE THIS SPACE TO LIST ADDITIONAL PROCESS CODES FROM SECTION D(1) ON PAGE 3.

The 4843 AMSF is a storage unit for alkali metal waste that exhibits the dangerous waste characteristics of ignitability (D001), corrosivity (D002), reactivity (D003), and state-only waste [Extremely Hazardous Waste (WT01) and Dangerous (WT02)]. A maximum of 22,000 gallons (185,000 pounds) of dangerous and mixed alkali metal waste may be stored at the 4843 AMSF. Section IV. B. represents the total amount of alkali metal waste that potentially may be stored in this waste management unit.

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility *(see instructions for more detail)*.

VI. PHOTOGRAPHS

All existing facilities must include photographs *(aerial or ground—level)* that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas *(see instructions for more detail)*.

VII. FACILITY GEOGRAPHIC LOCATION This information is provided on the attached drawings and photos

LATITUDE *(degrees, minutes, & seconds)*	LONGITUDE *(degrees, minutes, & seconds)*

VIII. FACILITY OWNER

[X] A. If the facility owner is also the facility operator as listed in Section VII on Form 1, "General Information", place an "X" in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER	2. PHONE NO. *(area code & no.)*

3. STREET OR P.O. BOX	4. CITY OR TOWN	5. ST.	6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
John D. Wagoner Manager, Richland Operations United States Department of Energy	John D. Wagoner	5/31/91

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

NAME *(print or type)*	SIGNATURE	DATE SIGNED
SEE ATTACHMENT		

X. OPERATOR CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

John D. Wagoner — 5/31/91

Owner/Operator
John D. Wagoner, Manager
U.S. Department of Energy
Richland Operations Office

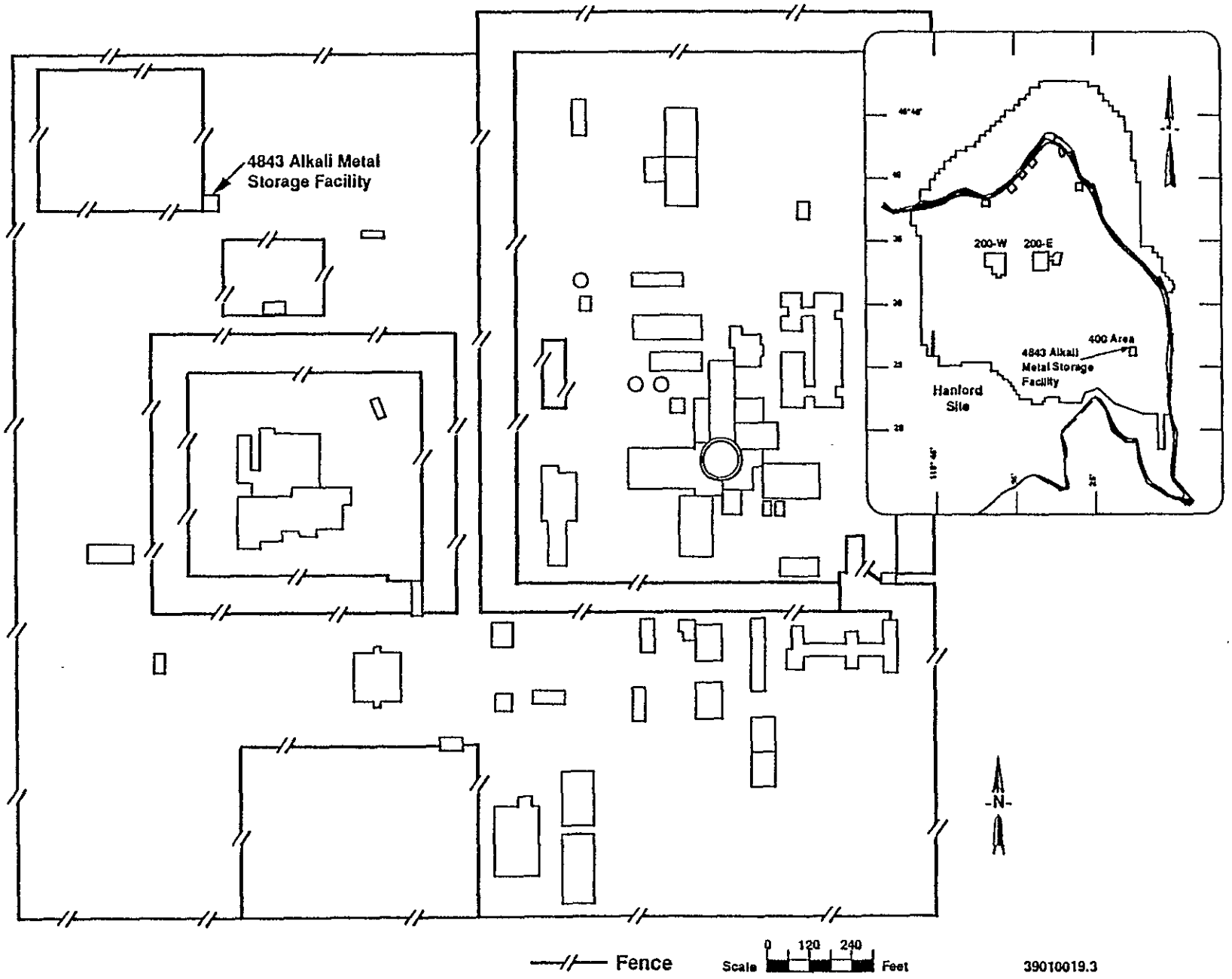
Date

Thomas M. Anderson — 4/23/91

Co-operator
Thomas M. Anderson, President
Westinghouse Hanford Company

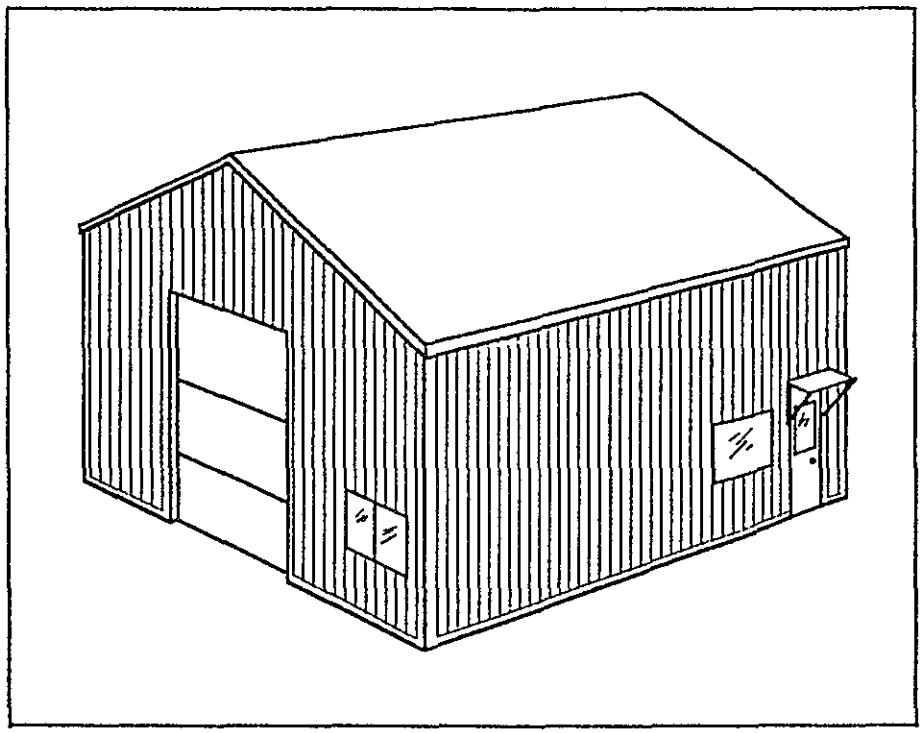
Date

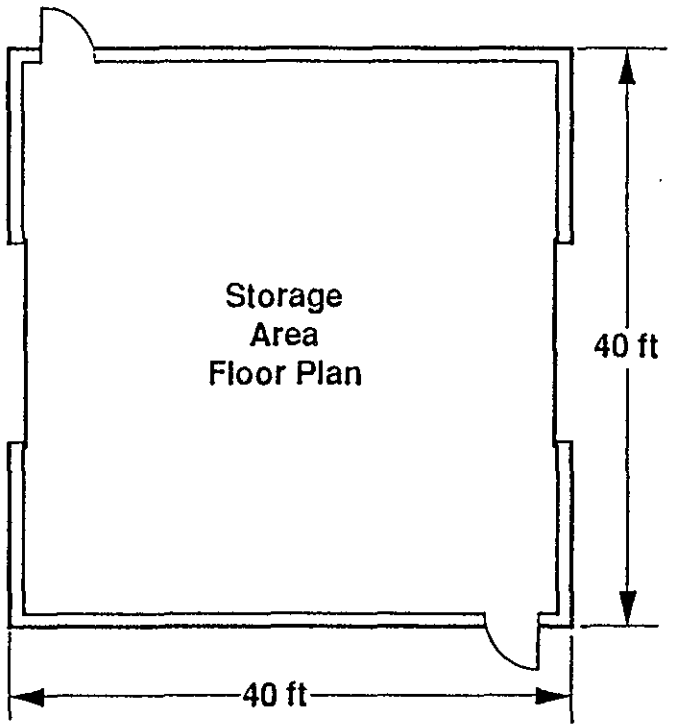
4843 Alkali Metal Storage Facility
Site Plan



4843 Alkali Metal Storage Facility

Fully insulated bolted steel building rests on a concrete slab.
Two 12-ft roll-up doors used for moving supplies into
and out of the building.

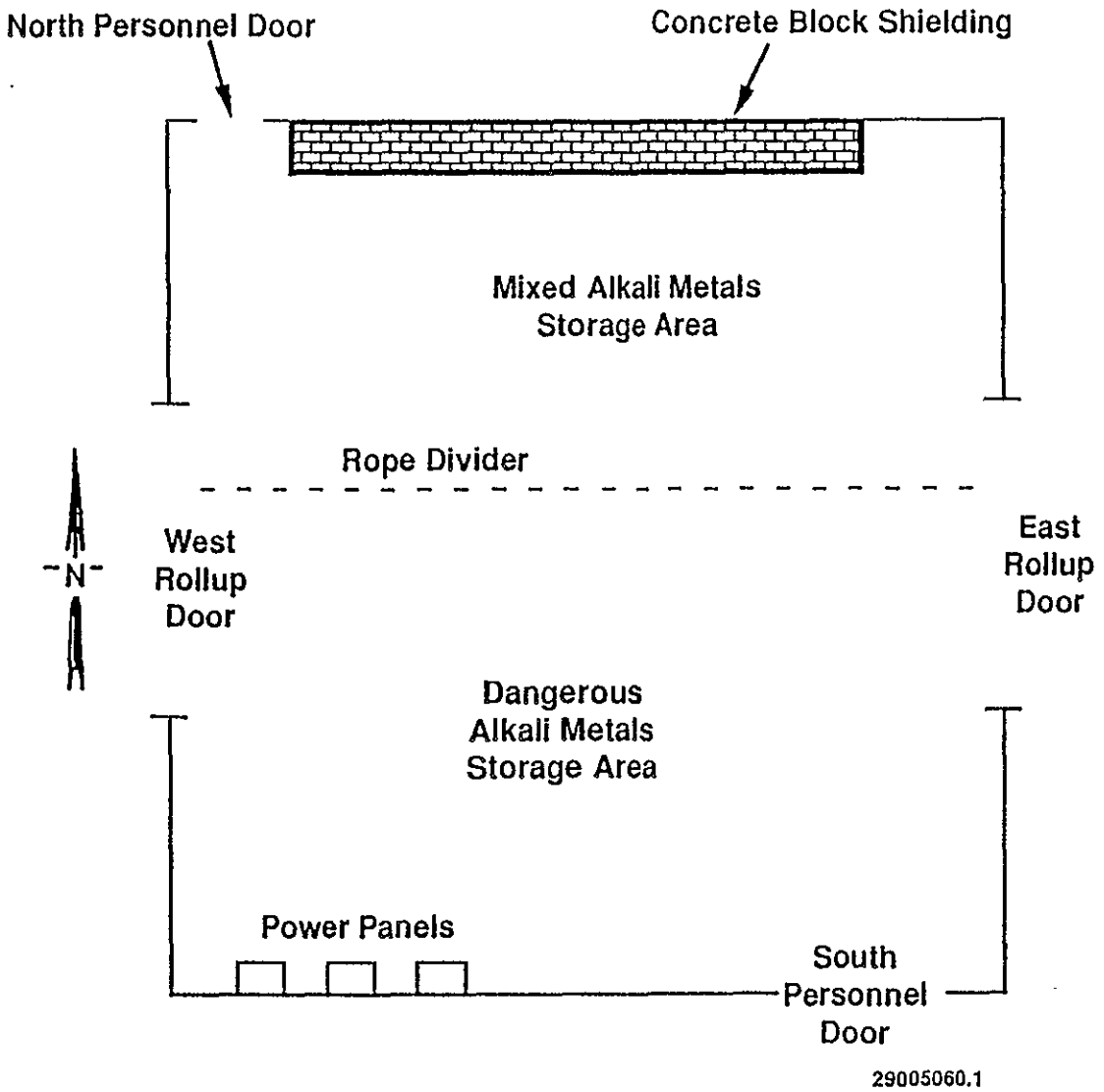




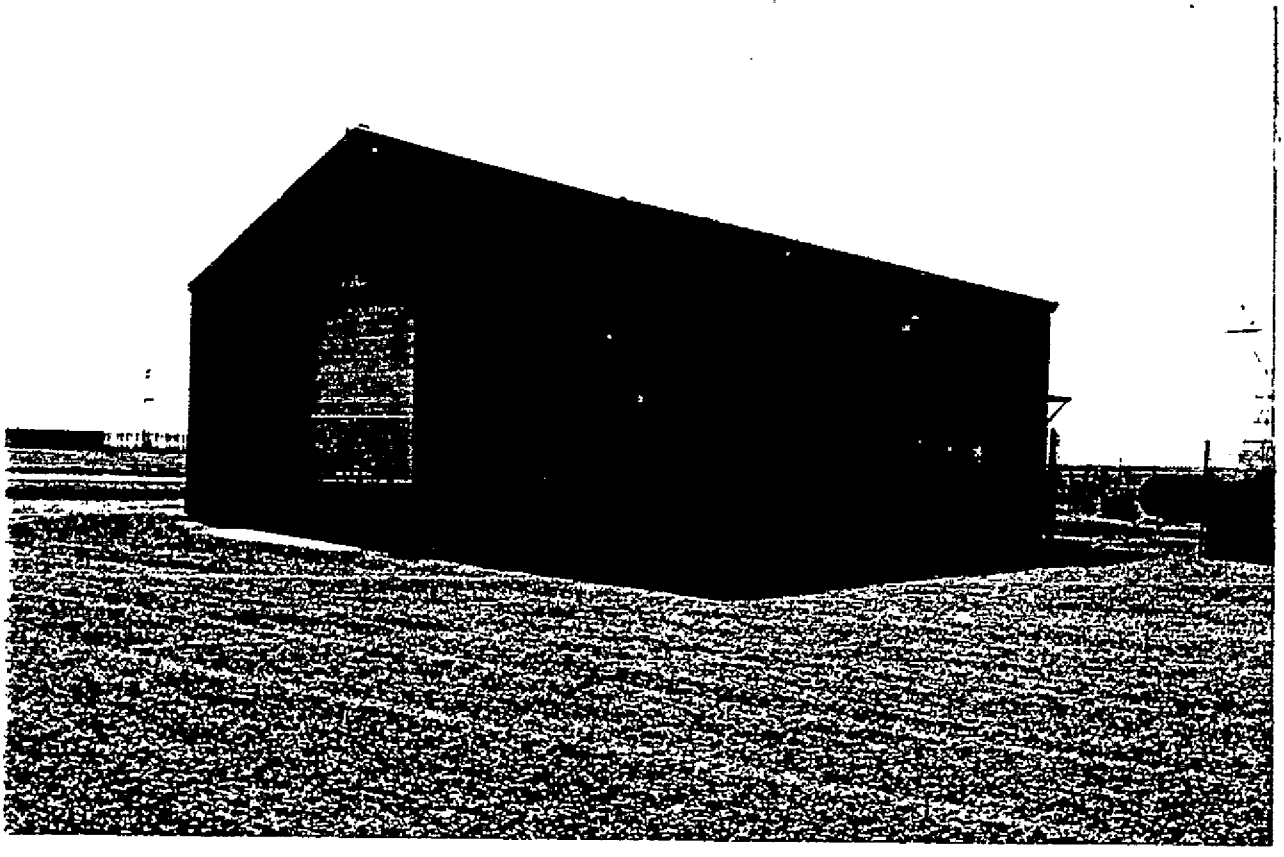
46° 26' 10"
119° 21' 43"

39010019.2

4843 Alkali Metal Storage Facility
Storage Area Floor Plan



4843 ALKALI METAL STORAGE FACILITY--400 AREA

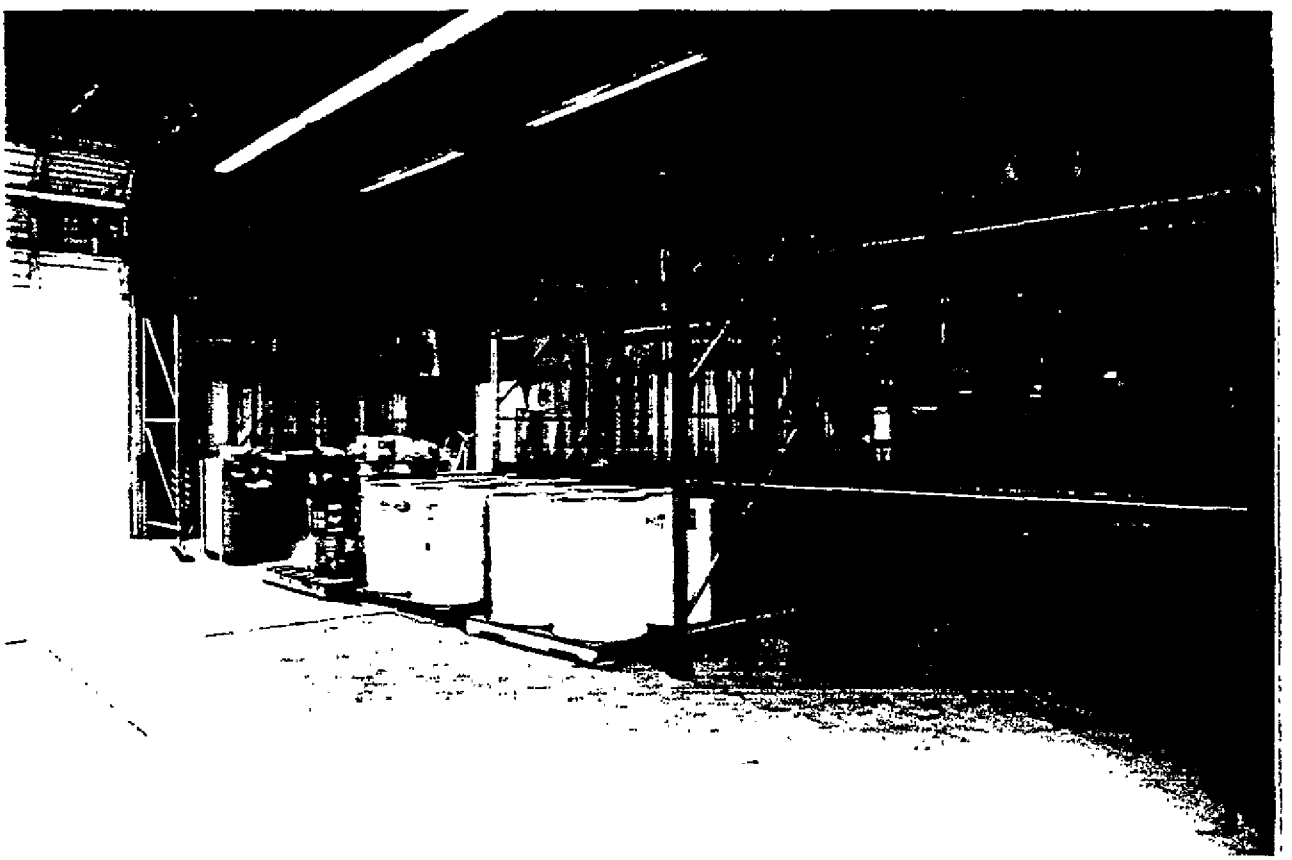


46°26'10"
119°21'43"

87044331-2CN
(PHOTO TAKEN 1987)

WA7890008967

4843 ALKALI METAL STORAGE FACILITY--400 AREA

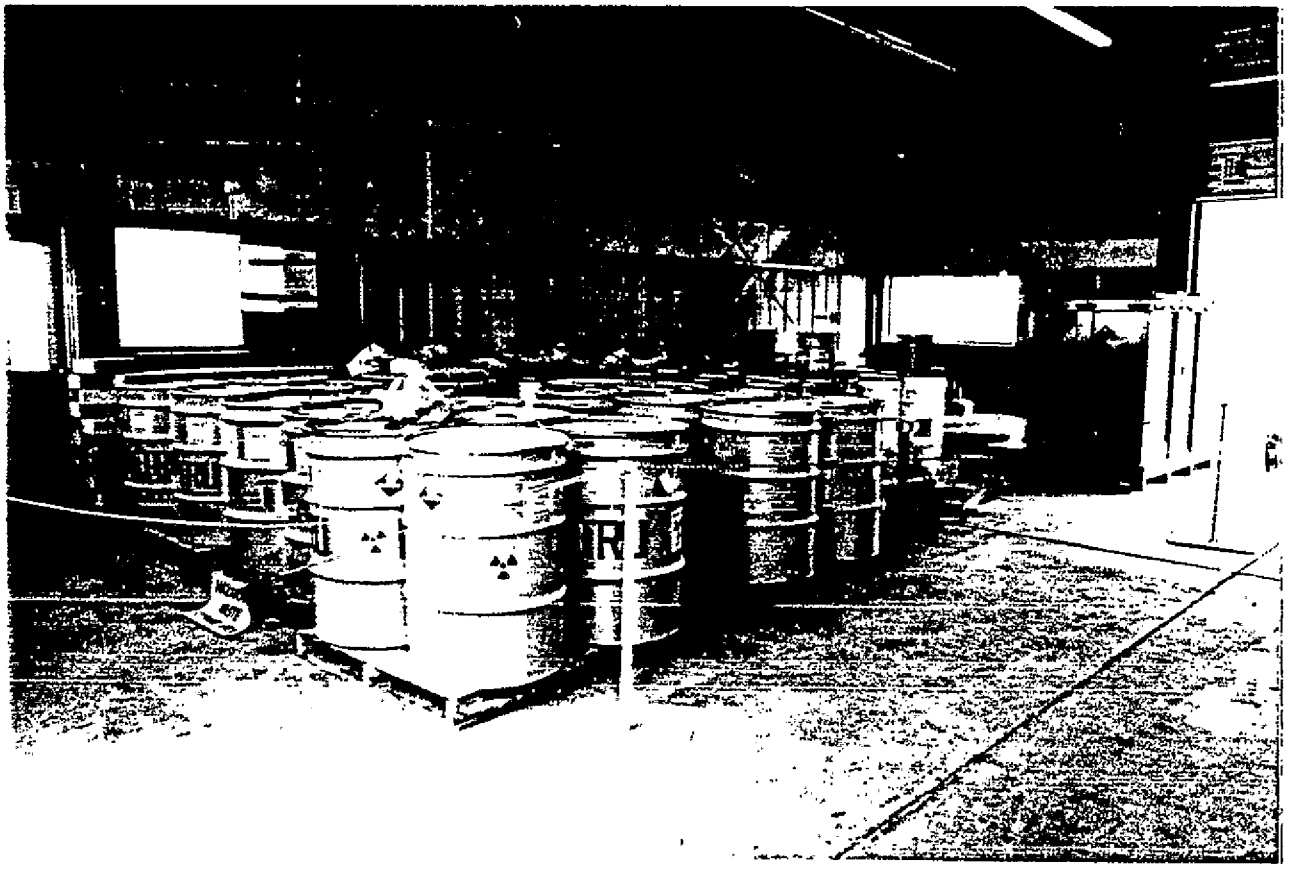


DANGEROUS ALKALI METAL STORAGE AREA

46°26'10"
119°21'43"

90121329-1CN
(PHOTO TAKEN 1990)

4843 ALKALI METAL STORAGE FACILITY--400 AREA



MIXED ALKALI METAL STORAGE AREA

46°26'10"
119°21'43"

90121329-3CN
(PHOTO TAKEN 1990)

ATTACHMENT 3

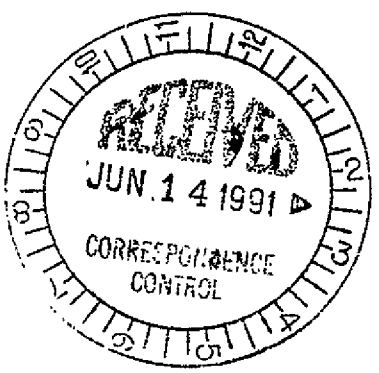
CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
B. M. Barnes, 6-3640	T. L. Nord, Ecology	Incoming 9102465 Ref. #9152006

Subject: REVISION TO THE DANGEROUS WASTE PART A PERMIT APPLICATION FOR THE 4843 ALKALI METAL STORAGE FACILITY (WA7890008967) (S-4-1)

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		B. M. Barnes	H4-57	
		R. J. Bliss	B3-04	
		R. W. Bloom	N1-36	
		R. C. Bowman	H4-57	
		L. C. Brown	H4-51	
		G. D. Carpenter	B2-16	
		C. B. Dean	L6-40	
		J. J. Dorian	H4-15	
		B. G. Erlandson	B2-19	
		C. J. Geier	H4-57	
		J. L. Gilbert	L6-40	
		E. M. Greager	L6-60	
		W. H. Hamilton Jr.	N3-10	
		R. J. Landon	B2-19	
		R. E. Lerch (Assignee)	B2-35	
		R. D. Pierce	N3-13	
		S. M. Price	H4-57	
		L. W. Roberts	T3-28	
		R. J. Roberts	N3-13	
		L. D. Schwartz	L6-40	
		A. R. Sherwood	B2-19	
		R. G. Stickney	N3-11	
		J. F. Williams Jr.	H4-57	
		B. D. Williamson	B3-15	
		B. L. Vedder	B2-19	
		EDMC	H4-22	
		BMB/LB	H4-57	



Attachments same as letter #9152006